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film 115 is combined with the silicon oxide film, the silicon nitrogen oxide film, the silicon nitride film or the like formed as the first interlayer insulating film 114 as in this embodiment.

IN THE CLAIMS:

Please amend the claims as follows:



Cancel Claims 1 and 2.

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3. (Twice Amended) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

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cont.

wherein the input terminal portion comprises a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode in contact with the first layer through a contact hole formed in the insulating layer.

✓ ✓
Cancel Claims 4 and 5.

6. A semiconductor device as claimed in claim 3, wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

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Cancel Claims 7 and 8.

9. A semiconductor device as claimed in claim 6, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

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Cancel Claims 10 and 11.

12. A semiconductor device as claimed in claim 3, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

Cancel Claims 13-24.

Please add the following new claims:

25. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion includes a first layer comprising the same material as that

of the gate electrode and a second layer comprising the same material as that of the pixel electrode,
and

wherein each of the gate electrode and the first layer has a tapered portion formed on at least
an end portion thereof.

26. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate
electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel
formation region formed in a semiconductor layer having an amorphous structure; source and drain
regions, each of the source and drain regions comprising a semiconductor layer including one-
conductive type impurity elements, formed over the semiconductor layer having the amorphous
structure;

an interlayer insulating layer comprising an inorganic material and formed on the
semiconductor layer having the amorphous structure and the semiconductor layer containing the
one-conductive type impurity elements so as to be in contact with at least a part of the channel
formation region;

a pixel electrode formed in contact with the insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as
that of the gate electrode, the insulating layer on the storage capacitor wiring and the pixel electrode
on the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically
connected to a wiring;

wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode.

27. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

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cont. an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, the insulating layer on the storage capacitor wiring and the pixel electrode on the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel

electrode in contact with the first layer through a contact hole formed in the insulating layer.

28. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

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an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, the insulating layer on the storage capacitor wiring and the pixel electrode on the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode, and

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a tapered portion formed on at least an end portion thereof.

29. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

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an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode in contact with the first layer through a contact hole formed in the insulating layer, and

wherein each of the gate electrode and the first layer has a tapered portion formed on at least an end portion thereof.

30. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, the thin-film transistor comprising a gate electrode formed over the substrate; an insulating layer formed on the gate electrode; a channel formation region formed in a semiconductor layer having an amorphous structure; source and drain regions, each of the source and drain regions comprising a semiconductor layer including one-conductive type impurity elements, formed over the semiconductor layer having the amorphous structure;

an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer;

a storage capacitor comprising a storage capacitor wiring comprising the same material as that of the gate electrode, the insulating layer on the storage capacitor wiring and the pixel electrode on the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring;

wherein the input terminal portion comprises a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode in contact with the first layer through a contact hole formed in the insulating layer, and

wherein each of the gate electrode, the storage capacitor wiring and the first layer has a tapered portion formed on at least an end portion thereof.

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